VERSION WITH MARKINGS TO SHOW CHANGES MADE:

1. A method for making a nitride laser diode array structure comprising the operations of:

providing a semiconductor membrane having an insulating substrate attached on a first side of said semiconductor membrane;

attaching a metallic interlayer to a second side of said semiconductor membrane;

attaching a thermally conducting substrate to said metallic interlayer ;

removing said insulating substrate from said first side of said semiconductor membrane by exposing said insulating substrate to laser light; and

placing a metal layer on said first side of said semiconductor membrane.

9. A method for making a nitride laser diode array comprising the operations of:

providing a semiconductor membrane having a first crystal plane, said semiconductor membrane having an insulating substrate attached to a first side of said semiconductor membrane and having a plurality of metal electrodes attached to a second side of said semiconductor membrane;

attaching a thermally conducting substrate having a second crystal plane to said first side of said semiconductor membrane such that said first and said second crystal planes are aligned;

removing said insulating substrate from said first side of said semiconductor membrane by exposing said insulating substrate to laser light; and

placing a metal layer on said first side of said semiconductor membrane.

13. A method for making a nitride laser diode array comprising the operations of:

providing a semiconductor membrane having a first crystal plane, said semiconductor membrane having an insulating substrate attached to a first side of said semiconductor membrane and having a plurality of metal electrodes attached to a second side of said semiconductor membrane;

attaching a thermally conducting substrate having a second crystal plane to said first side of said semiconductor membrane such that said first and said second crystal planes are aligned;

removing said insulating substrate from said first side of said semiconductor membrane by exposing said insulating substrate to laser light;

placing a metal layer on said first side of said semiconductor membrane; and

etching a trench through said metal layer and said semiconductor membrane, said trench dividing said metal layer and said semiconductor membrane into two separate sections.